



Fish Passage Center

Weekly Report #03 - 22

August 22, 2003

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Summary of Events:

Water Supply: Precipitation throughout the Columbia Basin has been variable over the first portion of August. Of the sites in Table 1, recorded precipitation has ranged between 12% and 97% of average in August. Over the entire water year, precipitation has ranged between 69% and 99% of average at the listed sites.

Table 1. Summary of August precipitation and cumulative October through August precipitation with respect to average (1971-2000), at select locations within the Columbia and Snake River Basins.

Location	August 1-18, 2003		Cumulative October, 1 2002 to August 18, 2003	
	Observed (inches)	% Average	Observed (inches)	% Average
Columbia Above Coulee	0.33	34	18.84	81
Snake River Above Ice Harbor	0.35	71	14.79	90
Columbia Above The Dalles	0.33	48	18.56	86
Kootenai	0.29	30	17.76	74
Clark Fork	0.39	51	13.76	85
Flathead	0.19	20	15.83	74
Pend Oreille/Spokane	0.55	74	26.51	90
Central Washington	0.18	82	8.48	99
Snake River Plain	0.33	97	7.27	69
Salmon/Boise/Payette	0.22	54	28.21	97
Clearwater	0.27	38	28.21	97
SW Washington Cascades/Cowlitz	0.10	12	57.18	84
Willamette Valley	0.37	60	51.44	90

The summer Biological Opinion Flow objectives are 50.7 Kcfs at Lower Granite (June 21st-August 31st) and 200 Kcfs at McNary (July 1st-August 31st). To date (August 21st 2003), flows have averaged 33.7 Kcfs at Lower Granite and 140.2 Kcfs at McNary.

Libby Reservoir is currently at an elevation of 2443.0 feet, and has drafted 3.2 feet in the last week. Outflows are currently 18.0 Kcfs.

Hungry Horse Reservoir is at an elevation of 3541.9 feet and has been drafted approximately 2.3 feet over the last week. Outflows have been gradually decreasing over the past week from approximately 5.2 kcfs to 4.0 Kcfs.

Dworshak Reservoir is currently at an elevation of 1541.8 feet, and has drafted 6.9 feet in the last week. Supplemental outflows from Dworshak to moderate temperatures in the Lower Snake River were reduced to a daily average of 7.1 Kcfs on August 20th and are projected to remain at a similar level through mid-September.

Grand Coulee Reservoir ended August 21st at an elevation of 1280.5 feet; the end of August draft limit is 1278 feet.

Spill: The Biological Opinion does not call for a summer spill program at Lower Granite, Little Goose and Lower Monumental dams. The transportation of juvenile fall chinook continues at these projects. At Ice Harbor Dam a modified 12-hour spill program continues to be implemented. Spill over the past week averaged 43% of average daily flow at this project.

The summer spill program is being implemented at John Day, The Dalles and Bonneville dams. Spill averaged 24%,38%, and 59% of average daily flow, respectively.

Total dissolved gas levels are presently below the gas waiver limits at all the federal projects. GBT monitoring is presently being implemented at Rock Island, McNary and Bonneville dams. No fish were detected with signs of GBT this past week at Rock Island Dam.

Smolt Monitoring: At Lower Granite Dam the average daily index for subyearling chinook decreased from 1,800 last week to 1,000 per day this week. Little Goose Dam saw a small decrease in the index to 800 this week compared to 900 last week. At Lower Monumental there was also a decrease, as subyearling indices averaged 250 this week compared to 400 last week.

At Rock Island Dam, in the mid-Columbia, subyearling chinook indices decreased last week with the daily average at 60 compared to 90 per day the previous week.

In the Lower Columbia, at McNary, the daily average index for subyearling chinook was down to 9,000 per day this week compared to 36,000 last week. At John Day Dam the average daily index for subyearling chinook decreased to 3,700 this week compared to 13,500 last week. At Bonneville Dam, the average daily index for subyearling chinook was at 4,800 this week compared to 6,700 last week.

Hatchery Releases - The preliminary total of juvenile salmonids released from Columbia River Basin hatcheries above Bonneville Dam for the 2003 migration season is estimated near 87.3 million. There will be supplemental and planned releases completed during this upcoming fall season that will be part of the 2004 migration season. The Zone Release Report below summarizes hatchery releases from State, federal or Tribal hatcheries or acclimation ponds for the 2003 Migration Season. These totals will be updated and finalized through the year.

Hatchery Zone Release Report	Friday 22-August-2003			
	Snake River	Mid-Columbia	Lower Columbia	Total Release
Fall Chinook	4,057,928	12,354,538	25,446,818	41,859,284
Spring Chinook	10,473,976	3,474,730	5,441,505	19,390,211
Summer Chinook	2,332,578	3,001,618		5,334,196
Coho	1,248,216	1,876,158	5,631,793	8,756,167
Sockeye	140,410	208,986		349,396
Summer Steelhead	9,687,941	1,344,613	490,667	11,523,221
Winter Steelhead			94,900	94,900
Total	27,941,049	22,260,643	37,105,683	87,307,375

Adult Fish Passage - CRITFC personnel sampled adult fish at the WA shore fish ladder at Bonneville Dam once or twice a week during most of the summer passage season to obtain data from summer chinook and sockeye that were passing Bonneville Dam. No sampling was completed after July 17 due to higher water temperatures in the adult sampling facility. Scales from the sampled fish as well as lengths were recorded during the sampling process. For the season, the summer chinook averaged 80.5 cm compared to 79.5 cm average for the spring chinook in 2003. As noted for the spring chinook, greater than 50% of the summer chinook spent 3-years (53.5% total) in the ocean, about 24% spent 2-years in the ocean, and about 10% spent 4-years in salt water. Approximately 13% of this year's run was comprised of

Jack chinook that resided a single year in the ocean. All estimates are preliminary.

At Bonneville Dam, numbers of adult fall chinook passing the project average about 700 per day with the cumulative count through August 21 at 14,580. This total is approximately 82.9% and 93.9% of the respective 2002 and 10-year average to date. The upriver bright component of the fall chinook run migrates and spawns through much of the Columbia River basin above Bonneville Dam while the "Tule" stock fall chinook mainly migrate and spawn in rivers located below The Dalles Dam. Chinook that migrate upstream of The Dalles Dam are mainly the upriver bright fall chinook. The adult count of fall chinook past McNary Dam totals 4,296 through August 21 with 3,300 counted above Priest Rapids Dam and 300 above Ice Harbor Dam. The Fall Run is just in its beginning stage of passage and fish counts will continue to increase at most projects for about the next month.

Numbers of steelhead at Bonneville Dam declined from near 6,000 early in the week to 4,000 by the end of the count week. The cumulative count through August 21 was 222,069 and compares to 267,237 in 2002 and 159,707 for the 10-year average. The steelhead count differential between Bonneville Dam and The Dalles Dam has risen to greater than 159,000 at present. Until the water temperatures begin to reduce in the mainstem Columbia River, many of these fish remain in the cooler tributaries located in the Bonneville pool. At McNary Dam, daily counts of adult steelhead were in the 300 to 700 range, while counts of steelhead averaged about 150 per day at Priest Rapids Dam. At Ice Harbor Dam and other Snake River projects, steelhead counts ranged from 100 to 400 per day. The cumulative count for Priest Rapids Dam was 6,637 with Ice Harbor at 21,147 through August 21.

The 2003 coho passage counts above Bonneville Dam should be excellent based on preseason estimates by the TAC. The cumulative count through August 21 was 992 adult coho, and that was about 3-times greater than the 10-year average. The coho passage is also just beginning to increase at Bonneville Dam. Much of the coho

production comes from the Bonneville pool tributaries. Above The Dalles Dam, coho are spread out through the Mid-Columbia area, the Yakama River basin, the Umatilla River basin and the Clearwater River basin.

Daily Average Flow and Spill (in kcfs) at Mid-Columbia Projects

Date	Grand Coulee		Chief Joseph		Wells		Rocky Reach		Rock Island		Wanapum		Priest Rapids	
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
08/08/03	95.6	0.1	100.1	0.0	100.9	7.0	100.6	9.5	101.2	15.0	101.4	30.9	97.4	54.4
08/09/03	83.5	0.1	80.2	0.0	83.0	6.2	83.4	9.8	86.5	13.4	101.7	31.3	101.2	56.8
08/10/03	68.9	0.1	73.9	0.0	72.8	6.0	70.2	9.5	71.5	12.5	79.6	24.7	76.8	43.1
08/11/03	116.6	0.1	110.5	0.0	111.3	7.5	110.6	13.6	112.0	19.5	111.9	35.0	103.9	58.4
08/12/03	84.2	0.1	90.4	0.0	90.5	7.2	88.0	16.5	90.7	22.3	103.2	32.4	104.0	58.6
08/13/03	91.4	0.1	90.7	0.0	93.1	7.4	89.3	17.2	89.4	23.2	92.1	8.6	91.6	50.8
08/14/03	108.9	0.1	112.3	0.0	111.1	7.0	113.6	12.9	114.1	16.9	111.6	2.5	106.1	21.9
08/15/03	111.1	0.1	112.1	0.0	117.7	45.0	109.7	0.0	110.2	20.0	114.3	2.0	115.8	2.5
08/16/03	83.7	0.1	82.7	0.0	81.3	21.3	85.0	0.0	86.7	18.4	92.2	2.0	92.1	1.0
08/17/03	54.2	0.1	58.8	0.0	64.1	4.8	62.7	0.0	65.0	0.0	69.3	1.9	70.9	1.0
08/18/03	108.9	0.1	106.1	0.0	105.2	6.8	100.5	0.0	101.4	0.0	99.5	2.1	89.6	1.1
08/19/03	97.8	0.1	102.3	0.0	102.0	6.8	100.8	0.0	100.9	0.0	107.6	1.7	109.0	0.9
08/20/03	123.4	0.1	117.8	0.0	115.3	7.5	112.7	0.0	112.4	0.0	114.3	3.2	108.4	2.8
08/21/03	135.5	0.1	133.5	0.0	134.4	10.3	122.9	0.3	121.2	0.0	124.8	4.9	125.3	3.8

Daily Average Flow and Spill (in kcfs) at Snake Basin Projects

Date	Dworshak		Hells Canyon		Lower Granite		Little Goose		Lower Monumental		Ice Harbor	
	Flow	Spill	Inflow	Outflow	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill
08/08/03	9.9	0.0	9.4	14.7	31.4	0.0	31.3	0.0	32.3	0.0	32.0	12.3
08/09/03	10.1	0.0	9.2	15.2	29.5	0.0	30.0	0.0	31.1	0.0	30.8	12.0
08/10/03	10.1	0.0	9.7	14.6	30.2	0.0	30.0	0.0	31.9	0.0	30.8	9.6
08/11/03	10.1	0.0	9.0	14.9	29.7	0.0	29.3	0.0	30.3	0.0	30.8	11.5
08/12/03	10.1	0.0	8.2	10.4	30.2	0.0	30.5	0.0	31.5	0.0	30.4	10.1
08/13/03	10.1	0.0	8.0	11.5	24.0	0.0	25.1	0.0	25.2	0.0	23.9	8.5
08/14/03	10.1	0.0	9.7	11.2	22.4	0.0	29.0	0.0	31.1	0.0	31.4	10.2
08/15/03	10.2	0.0	8.2	12.5	26.1	0.0	24.5	0.0	25.8	0.0	24.2	10.4
08/16/03	10.2	0.0	8.4	8.2	27.8	0.0	26.1	0.0	27.6	0.0	27.1	12.9
08/17/03	10.2	0.0	8.2	9.2	21.9	0.0	21.6	0.0	21.7	0.0	19.8	9.9
08/18/03	10.2	0.0	8.5	13.8	25.2	0.0	25.8	0.0	27.4	0.0	27.9	12.2
08/19/03	8.4	0.0	8.6	13.5	27.8	0.0	28.8	0.0	29.6	0.0	27.3	10.7
08/20/03	7.1	0.0	8.4	11.6	24.7	0.0	24.9	0.0	25.8	0.0	25.2	8.7
08/21/03	7.1	0.0	---	---	21.7	0.0	20.5	0.0	21.6	0.0	21.7	9.7

Daily Average Flow and Spill (in kcfs) at Lower Columbia Projects

Date	McNary		John Day		The Dalles			Bonneville		PH1	PH2
	Flow	Spill	Flow	Spill	Flow	Spill	Flow	Spill			
08/08/03	115.1	0.0	114.5	30.8	109.5	39.8	144.5	86.9	0.0	50.8	
08/09/03	134.4	0.0	128.2	31.7	131.5	48.3	147.2	88.1	0.0	52.4	
08/10/03	112.1	0.0	109.9	27.5	111.3	43.8	141.4	87.5	0.0	47.2	
08/11/03	126.3	0.0	125.5	28.0	123.4	45.6	146.3	84.7	0.0	54.9	
08/12/03	140.4	0.0	143.9	34.3	144.2	55.5	172.6	94.8	0.0	71.1	
08/13/03	128.3	0.0	128.8	28.2	130.6	48.4	163.6	96.3	0.0	60.6	
08/14/03	127.4	0.0	123.3	28.8	123.2	45.0	154.2	90.3	0.0	57.3	
08/15/03	134.8	0.0	121.2	25.4	127.4	48.4	148.5	85.9	0.0	55.9	
08/16/03	118.7	0.0	108.9	30.2	107.1	39.3	131.6	90.1	0.0	34.8	
08/17/03	110.0	0.0	116.4	28.3	121.6	48.0	154.1	90.4	0.0	57.0	
08/18/03	120.1	0.0	122.4	27.5	125.4	44.9	146.1	88.0	0.0	51.4	
08/19/03	141.1	0.0	133.3	28.3	139.1	54.5	169.1	89.7	1.6	71.1	
08/20/03	140.4	0.0	136.1	32.2	137.6	50.3	161.8	94.6	3.2	56.4	
08/21/03	201.8	0.8	141.3	35.5	140.1	55.8	180.6	100.5	2.5	70.9	

Gas Bubble Trauma Monitoring Results from Representative Sites on the Snake River and Columbia River

Site	Date	Species	Number of Fish	Number w GBT signs	Number w Fin Signs	% Fin GBT	% Severe Fin GBT	Number of Fish with Fin GBT Listed by Highest Rank			
								Rank 1	Rank 2	Rank 3	Rank 4
McNary Dam											
	08/14/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/18/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
Bonneville Dam											
	08/14/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0
	08/18/03	Chinook + Steelhead	101	0	0	0.00%	0.00%	0	0	0	0
	08/21/03	Chinook + Steelhead	100	0	0	0.00%	0.00%	0	0	0	0

HATCHERY RELEASE NEXT TWO WEEKS

Hatchery Release Summary									
From:		8/22/03		to		9/4/03			
Agency	Hatchery	Species	Race	MigYr	NumRel	RelStart	RelEnd	RelSite	RelRiver
Washington Dept. of Fish and Wildlife	Eastbank Hatchery	SO	UN	2004	110,000	08-29-03	08-31-03	Lake Wenatchee	Wenatchee River
Washington Dept. of Fish and Wildlife Total					110,000				
Grand Total					110,000				

Total Dissolved Gas Saturation (%) - Average of 12 Highest Hours, 24 h Average and 24 h High

Total Dissolved Gas Saturation Data at Upper Columbia River Sites

Date	<u>Hungry H. Dnst</u>			<u>Boundary</u>			<u>Grand Coulee</u>			<u>Grand C. Tlwr</u>			<u>Chief Joseph</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>		
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
8/8	---	---	---	0	113	114	115	24	106	107	107	24	108	109	113	24	107	108	108	23
8/9	---	---	---	0	113	114	115	24	106	107	107	24	108	109	111	24	108	108	109	23
8/10	---	---	---	0	106	107	111	24	106	106	106	24	108	109	113	24	107	108	108	23
8/11	---	---	---	0	106	106	107	24	106	106	106	24	107	107	111	24	107	107	108	23
8/12	---	---	---	0	106	107	109	24	106	106	106	24	107	108	110	24	107	107	108	23
8/13	---	---	---	0	106	106	107	24	106	106	107	24	106	107	110	24	107	107	107	23
8/14	---	---	---	0	106	106	107	24	106	107	107	24	106	107	110	24	106	106	107	23
8/15	---	---	---	0	106	107	108	24	107	107	107	24	106	107	109	24	107	107	108	23
8/16	---	---	---	0	---	---	---	0	105	106	107	24	106	107	112	24	106	106	107	23
8/17	---	---	---	0	107	107	107	5	106	106	106	24	105	105	106	4	106	106	107	23
8/18	---	---	---	0	105	106	109	24	106	106	106	23	106	107	111	24	106	106	107	23
8/19	---	---	---	0	106	106	108	24	106	107	107	24	107	107	111	24	106	106	107	23
8/20	---	---	---	0	104	105	106	24	106	106	107	24	106	106	110	24	106	106	106	23
8/21	---	---	---	0	106	106	109	24	106	106	106	24	106	106	110	24	105	106	106	23

Total Dissolved Gas Saturation Data at Mid Columbia River Sites

Date	<u>Chief J. Dnst</u>			<u>Wells</u>			<u>Wells Dwnstrm</u>			<u>Rocky Reach</u>			<u>Rocky R. Tlwr</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>		
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
8/8	108	109	109	23	108	108	109	24	110	110	110	24	109	110	110	20	110	110	111	18
8/9	107	108	110	23	107	108	110	24	109	110	111	24	109	110	110	22	110	110	111	20
8/10	107	108	110	23	107	108	109	24	110	112	117	24	110	110	111	19	110	111	112	17
8/11	106	107	107	23	107	108	108	24	109	110	110	24	109	109	109	17	109	110	110	16
8/12	107	108	109	23	106	107	108	24	108	109	110	24	109	109	110	13	110	110	110	13
8/13	107	107	109	22	107	108	111	24	108	109	110	24	109	109	110	17	110	110	110	16
8/14	106	107	108	23	107	108	109	24	109	110	113	24	109	109	109	19	110	110	110	19
8/15	107	107	109	23	108	108	109	24	118	127	138	24	109	109	111	17	110	110	110	15
8/16	107	107	110	23	107	107	108	24	113	118	129	24	109	110	110	20	110	110	110	19
8/17	106	108	109	23	106	108	109	24	108	109	111	24	110	111	117	15	110	110	110	15
8/18	106	106	107	23	107	108	108	24	108	109	110	24	119	120	122	17	110	110	110	17
8/19	107	107	108	23	107	107	108	22	109	110	111	22	113	113	117	11	---	---	---	0
8/20	106	106	107	23	105	106	106	24	108	108	111	24	108	108	109	20	110	110	110	19
8/21	106	106	107	23	106	107	108	24	108	109	112	24	108	108	109	14	110	110	110	14

Total Dissolved Gas Saturation at Mid Columbia River Sites

Date	<u>Rock Island</u>			<u>Rock I. Tlwr</u>			<u>Wanapum</u>			<u>Wanapum Tlwr</u>			<u>Priest Rapids</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>		
	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>	<u>Avg</u>	<u>Avg</u>	<u>High</u>	<u>hr</u>
8/8	110	110	110	20	115	115	118	19	108	108	110	24	115	116	117	23	112	113	114	24
8/9	109	110	110	21	114	115	117	19	107	108	109	24	115	115	116	21	113	114	115	24
8/10	109	110	110	18	114	115	116	17	106	107	107	24	114	115	116	23	110	112	114	24
8/11	109	109	110	16	115	116	118	15	106	106	107	24	114	114	115	10	109	111	113	24
8/12	110	110	111	13	116	116	119	12	105	105	106	24	113	114	115	24	110	111	112	24
8/13	110	110	111	17	116	117	118	15	105	106	106	24	111	113	115	24	109	110	111	24
8/14	110	110	110	18	115	117	120	17	106	107	109	24	110	110	111	24	109	110	111	24
8/15	109	109	110	16	115	115	117	14	106	107	108	24	111	112	112	24	110	110	112	24
8/16	110	110	110	19	116	116	116	19	105	106	107	24	108	109	111	24	108	109	110	24
8/17	110	110	110	15	116	116	116	15	104	105	106	24	106	106	107	24	106	106	107	24
8/18	113	115	120	17	115	116	120	15	105	106	107	24	108	109	110	24	106	107	108	24
8/19	114	114	116	9	114	114	117	8	106	106	107	24	108	109	109	24	107	107	108	24
8/20	108	108	110	20	108	108	111	18	104	105	107	24	106	106	107	24	105	105	106	24
8/21	108	108	109	14	108	108	108	12	105	106	107	24	110	111	111	24	106	107	108	24

Total Dissolved Gas Saturation (%) - Average of 12 Highest Hours, 24 h Average and 24 h High

Total Dissolved Gas Saturation Data at Lower Columbia and Snake River Sites

Date	<u>Priest R. Dnst</u>			<u>Pasco</u>			<u>Dworshak</u>			<u>Clrwtr-Peck</u>			<u>Anatone</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
8/8	114	116	119	24	109	110	110	24	100	100	100	24	102	104	105	24	102	103	105	24
8/9	116	117	119	24	110	111	111	24	100	100	100	24	102	104	105	24	102	103	104	24
8/10	112	114	115	24	111	111	112	24	100	100	100	21	102	104	105	24	102	103	104	24
8/11	114	116	118	24	108	108	109	23	99	99	100	20	102	103	105	24	101	102	103	24
8/12	115	116	117	24	108	110	110	24	99	100	100	21	102	103	104	24	102	102	104	24
8/13	113	115	117	24	109	109	110	24	99	99	100	21	102	103	104	24	102	102	104	22
8/14	112	114	117	24	109	109	110	21	99	100	100	24	102	103	104	24	102	103	105	24
8/15	110	110	111	24	108	109	110	21	100	100	100	24	102	103	105	24	102	103	104	24
8/16	108	109	109	24	105	106	106	24	99	99	100	24	102	103	104	24	102	103	104	24
8/17	106	106	107	24	106	106	107	24	99	99	100	21	101	103	104	24	102	103	105	24
8/18	106	107	107	24	105	106	107	20	99	100	100	24	102	103	104	24	102	103	105	24
8/19	107	107	107	24	105	106	106	22	100	100	101	24	102	104	106	24	102	103	104	24
8/20	105	106	106	24	104	104	105	24	99	100	100	16	102	103	105	24	101	103	104	24
8/21	107	107	109	24	104	105	105	21	100	100	101	24	102	104	105	24	102	103	104	24

Total Dissolved Gas Saturation Data at Snake River Sites

Date	<u>Clrwtr-Lewiston</u>			<u>Lower Granite</u>			<u>L. Granite Tlwr</u>			<u>Little Goose</u>			<u>L. Goose Tlwr</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
8/8	103	105	107	24	104	106	107	24	101	101	101	24	103	104	106	24	101	102	104	24
8/9	103	105	107	24	104	105	106	24	101	101	102	24	103	104	105	24	101	101	102	24
8/10	103	105	107	24	103	104	104	24	100	101	101	24	102	102	104	24	100	101	102	24
8/11	103	105	107	24	102	103	104	24	100	100	101	24	99	100	100	24	99	99	100	24
8/12	103	105	107	24	104	106	108	24	100	101	101	24	100	101	103	21	99	100	100	21
8/13	103	105	106	24	106	108	111	24	106	113	126	24	103	104	105	24	100	101	102	24
8/14	103	105	107	24	108	110	111	24	126	129	131	22	107	110	111	24	100	101	102	24
8/15	103	104	106	24	108	109	110	24	128	130	134	24	108	108	109	24	100	100	101	24
8/16	103	104	105	24	103	104	106	24	126	128	132	24	99	100	103	24	99	99	100	24
8/17	103	105	106	24	105	106	108	24	126	129	131	24	101	101	102	24	100	100	101	24
8/18	103	105	107	24	108	110	111	24	118	130	134	24	102	103	104	24	100	100	101	24
8/19	103	105	106	24	109	109	110	24	102	103	108	24	104	106	108	24	102	103	104	24
8/20	103	105	107	24	104	105	106	24	100	100	101	24	103	104	104	24	104	105	107	24
8/21	103	105	106	24	106	107	108	24	102	103	110	24	104	105	106	24	105	105	105	24

Total Dissolved Gas Saturation Data at Snake and Lower Columbia River Sites

Date	<u>Lower Mon.</u>			<u>L. Mon. Tlwr</u>			<u>Ice Harbor</u>			<u>Ice Harbor Tlwr</u>			<u>McNary-Oregon</u>			#				
	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>	<u>24 h</u>	<u>12 h</u>	<u>High</u>					
	Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg		Avg	Avg			Avg			
8/8	103	104	106	24	101	102	103	24	102	104	106	24	108	113	116	24	108	110	113	24
8/9	102	102	104	24	101	101	102	24	101	103	106	24	109	114	116	24	110	112	114	24
8/10	101	102	104	24	100	101	101	23	100	101	103	24	107	113	116	24	107	108	110	24
8/11	102	103	104	24	100	101	101	24	101	102	104	24	108	113	115	24	107	109	111	24
8/12	104	105	107	23	101	101	102	24	103	104	109	24	108	113	115	24	109	110	111	24
8/13	104	104	105	24	101	101	102	24	104	107	111	24	108	113	115	24	109	111	112	24
8/14	106	108	110	24	100	101	103	24	103	105	110	24	108	113	115	24	110	112	115	24
8/15	106	107	108	24	100	100	101	23	103	105	111	24	109	113	115	24	109	111	114	24
8/16	100	100	101	24	99	100	101	24	100	101	102	24	108	113	115	24	105	106	107	24
8/17	101	102	102	24	100	101	103	23	101	102	103	24	110	114	115	24	105	107	108	24
8/18	102	104	107	24	101	102	102	23	104	108	113	24	109	113	115	24	108	111	113	24
8/19	103	105	108	24	101	101	102	24	104	107	111	24	108	113	114	24	110	112	113	24
8/20	101	102	103	24	100	100	102	24	100	102	105	24	108	113	114	24	106	108	110	24
8/21	104	105	106	24	101	102	104	23	104	106	110	24	108	112	114	24	108	110	111	24

Total Dissolved Gas Saturation (%) - Average of 12 Highest Hours, 24 h Average and 24 h High

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>McNary-Wash</u>			<u>McNary Tlwr</u>			<u>John Day</u>			<u>John Day Tlwr</u>			<u>The Dalles</u>							
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>					
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	AVG	High	hr				
8/8	106	107	108	24	105	105	105	24	102	103	103	23	109	115	118	24	106	107	108	23
8/9	106	107	108	24	105	106	106	24	102	102	103	23	108	114	116	24	106	108	108	23
8/10	108	109	111	24	106	107	107	24	102	102	103	23	108	115	118	24	104	106	108	23
8/11	106	107	108	23	106	106	106	24	102	102	102	23	108	114	117	24	105	106	107	23
8/12	108	108	108	24	106	106	107	24	102	102	102	23	108	115	117	24	103	104	108	23
8/13	110	110	114	24	106	107	108	24	102	102	102	23	108	114	117	24	105	107	109	23
8/14	110	112	114	24	106	106	107	24	103	105	107	23	108	115	118	24	105	108	109	23
8/15	111	111	112	24	106	107	107	24	103	104	105	23	108	114	117	24	106	108	110	23
8/16	112	112	113	24	105	105	105	24	101	101	102	23	108	113	117	24	104	105	106	23
8/17	113	113	116	24	105	105	106	24	101	102	103	23	108	114	117	24	103	103	103	23
8/18	113	114	117	24	105	106	106	24	101	102	103	23	107	113	119	24	107	109	110	23
8/19	113	115	117	24	104	105	105	24	102	102	102	23	109	116	118	24	104	105	106	23
8/20	112	114	119	24	104	105	105	24	102	103	106	23	109	115	118	24	104	105	107	23
8/21	116	117	119	24	105	105	106	24	104	104	105	23	108	113	118	21	105	107	109	23

Total Dissolved Gas Saturation Data at Lower Columbia River Sites

Date	<u>The Dalles Dnst</u>			<u>Bonneville</u>			<u>Warrendale</u>			<u>Camas\Washugal</u>						
	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24 h</u>	<u>12 h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>	<u>24h</u>	<u>12h</u>	<u>#</u>				
	Avg	Avg	High	hr	Avg	Avg	High	hr	Avg	Avg	High	hr				
8/8	113	114	115	24	105	105	105	23	111	113	114	23	107	109	110	24
8/9	113	114	115	24	105	105	105	23	111	111	112	23	107	108	109	24
8/10	114	115	116	24	104	105	105	23	112	114	116	23	107	109	111	24
8/11	113	114	115	24	104	104	104	23	110	111	111	23	106	107	109	24
8/12	113	114	114	24	105	105	106	23	111	113	114	23	107	109	110	24
8/13	114	114	116	24	106	106	107	23	113	115	118	23	107	110	112	24
8/14	114	114	115	24	107	107	107	23	113	114	116	23	109	111	113	24
8/15	113	114	115	24	107	107	107	23	111	112	114	23	107	108	111	24
8/16	112	113	113	24	104	105	106	23	111	112	114	23	107	109	111	24
8/17	113	113	114	24	104	104	104	23	111	113	115	23	109	111	113	24
8/18	114	115	116	24	104	104	105	23	110	110	112	23	108	109	110	24
8/19	113	113	114	24	104	105	105	23	109	109	111	16	106	108	110	24
8/20	113	113	114	24	104	105	106	23	110	112	112	22	106	109	111	24
8/21	113	114	115	24	106	107	108	23	112	115	117	23	109	112	114	24

Two-Week Summary of Passage Indices

COMBINED YEARLING CHINOOK											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/08/2003	---	---	---	---	0	0	4	0	0	0	0
08/09/2003	---	---	---	---	5	0	4	0	0	0	0
08/10/2003	---	---	---	---	0	0	0	0	0	0	0
08/11/2003	---	---	---	---	0	0	0	0	0	0	0
08/12/2003	---	---	---	---	0	0	4	1	0	0	0
08/13/2003 *	---	---	---	---	0	0	3	1	0	0	0
08/14/2003 *	---	---	---	---	0	0	0	0	0	0	0
08/15/2003	---	---	---	---	0	0	1	0	0	0	0
08/16/2003	---	---	---	---	5	2	1	0	0	0	0
08/17/2003	---	---	---	---	0	0	2	0	0	0	0
08/18/2003	---	---	---	---	5	0	2	0	0	0	0
08/19/2003	---	---	---	---	0	2	0	0	0	0	0
08/20/2003 *	---	---	---	---	0	0	2	0	0	0	0
08/21/2003 *	---	---	---	---	0	3	4	0	14	0	22
08/22/2003	---	---	---	---	0	---	4	0	---	0	---
Total:	0	0	0	0	15	7	31	2	14	0	22
# Days:	0	0	0	0	15	14	15	15	14	15	14
Average:	0	0	0	0	1	1	2	0	1	0	2
YTD	32,064	34,028	11,123	2,417	3,599,190	2,503,032	785,259	15,353	1,624,052	2,074,655	4,043,758

COMBINED SUBYEARLING CHINOOK											
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/08/2003	---	---	---	---	1,740	1,990	444	132	50,400	2,877	11,969
08/09/2003	---	---	---	---	2,000	1,200	376	109	42,300	8,210	4,758
08/10/2003	---	---	---	---	2,930	772	608	105	55,600	5,396	3,921
08/11/2003	---	---	---	---	1,880	624	424	93	48,850	7,010	3,693
08/12/2003	---	---	---	---	1,625	620	472	76	32,650	20,479	4,602
08/13/2003 *	---	---	---	---	1,150	605	234	91	11,250	31,445	9,237
08/14/2003 *	---	---	---	---	1,430	441	200	53	13,475	19,003	8,938
08/15/2003	---	---	---	---	875	552	209	102	14,660	8,475	7,570
08/16/2003	---	---	---	---	1,665	744	159	70	7,720	4,632	6,959
08/17/2003	---	---	---	---	1,405	556	157	37	11,200	3,462	6,651
08/18/2003	---	---	---	---	795	1,441	310	29	9,357	2,757	4,263
08/19/2003	---	---	---	---	860	1,075	284	40	8,643	3,144	2,432
08/20/2003 *	---	---	---	---	775	758	361	83	3,914	1,587	2,929
08/21/2003 *	---	---	---	---	364	594	710	36	6,071	2,119	3,430
Total:	0	0	0	0	19,494	11,972	4,948	1,056	316,090	120,596	81,352
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	1,392	855	353	75	22,578	8,614	5,811
YTD	1	118	74	355	1,391,571	668,415	335,852	27,886	7,639,378	2,702,878	7,881,128

* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>

Smolt indices, clipped & unclipped or combined, are presented in the following order: yearling chinook (chinook 1's), subyearling chinook (chinook 0's), steelhead, coho, and sockeye. Two classes of fish counts are shown in these tables: collection counts, which account for sample rates but are not adjusted for flow; and passage indices, which are collection counts divided by the proportion of water passing through the sampled powerhouse. Passage indices are not population estimates, but are used to adjust collection counts for daily fluctuations in the site's or project's operations. The classes of counts presented in the report are defined below for each site. Most samples occur over a 24-hr period that spans two calendar days. In this report, the date shown corresponds with the sample end date.

Two-Week Summary of Passage Indices

COMBINED COHO												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/08/2003	---	---	---	---	35	0	4	0	0	0	0	0
08/09/2003	---	---	---	---	40	15	16	0	0	0	0	0
08/10/2003	---	---	---	---	55	20	0	0	0	47	0	0
08/11/2003	---	---	---	---	65	8	4	0	0	40	0	0
08/12/2003	---	---	---	---	25	12	4	0	0	0	0	0
08/13/2003	*	---	---	---	25	12	0	0	0	0	0	0
08/14/2003	*	---	---	---	35	10	0	0	0	0	0	0
08/15/2003	---	---	---	---	35	11	1	0	0	0	0	0
08/16/2003	---	---	---	---	65	11	1	1	0	0	0	0
08/17/2003	---	---	---	---	10	3	1	1	0	0	0	0
08/18/2003	---	---	---	---	25	7	0	0	0	0	0	0
08/19/2003	---	---	---	---	15	14	2	0	0	0	0	0
08/20/2003	*	---	---	---	15	9	0	0	0	17	0	0
08/21/2003	*	---	---	---	4	2	1	1	0	0	0	0
Total:	0	0	0	0	449	134	34	3	0	104	0	0
# Days:	0	0	0	0	14	14	14	14	14	14	14	14
Average:	0	0	0	0	32	10	2	0	0	7	0	0
YTD	0	0	0	17	132,833	117,981	37,596	41,684	113,579	258,277	2,116,425	

COMBINED STEELHEAD												
	WTB	IMN	GRN	LEW	LGR	LGS	LMN	RIS	MCN	JDA	BO2	
Date	(Coll)	(Coll)	(Coll)	(Coll)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)	(INDEX)
08/08/2003	---	---	---	---	70	10	0	1	0	0	0	0
08/09/2003	---	---	---	---	45	20	0	1	50	0	0	0
08/10/2003	---	---	---	---	85	28	4	0	0	0	0	0
08/11/2003	---	---	---	---	60	12	0	1	0	0	0	0
08/12/2003	---	---	---	---	45	12	0	0	0	0	0	0
08/13/2003	*	---	---	---	20	12	0	1	0	0	0	0
08/14/2003	*	---	---	---	25	10	1	0	0	0	0	0
08/15/2003	---	---	---	---	45	11	4	0	0	0	10	0
08/16/2003	---	---	---	---	45	18	6	0	0	0	0	0
08/17/2003	---	---	---	---	40	18	5	0	0	0	0	0
08/18/2003	---	---	---	---	15	9	0	0	0	0	0	0
08/19/2003	---	---	---	---	10	2	2	0	0	0	0	0
08/20/2003	*	---	---	---	50	2	3	0	0	0	0	0
08/21/2003	*	---	---	---	40	6	2	0	0	0	0	0
Total:	0	0	0	0	595	170	27	4	50	0	10	
# Days:	0	0	0	0	14	14	14	14	14	14	14	14
Average:	0	0	0	0	43	12	2	0	4	0	1	
YTD	2,347	48,404	2,521	5,601	3,355,269	2,593,253	1,865,448	15,501	245,583	553,482	1,635,149	

* See sampling comments

Two-Week Summary of Passage Indices

Date	COMBINED SOCKEYE										
	WTB (Coll)	IMN (Coll)	GRN (Coll)	LEW (Coll)	LGR (INDEX)	LGS (INDEX)	LMN (INDEX)	RIS (INDEX)	MCN (INDEX)	JDA (INDEX)	BO2 (INDEX)
08/08/2003	---	---	---	---	0	0	0	0	150	0	0
08/09/2003	---	---	---	---	0	0	0	0	50	45	0
08/10/2003	---	---	---	---	0	0	0	1	100	0	56
08/11/2003	---	---	---	---	0	0	0	1	150	0	0
08/12/2003	---	---	---	---	0	0	0	0	50	91	0
08/13/2003 *	---	---	---	---	0	0	0	1	0	0	16
08/14/2003 *	---	---	---	---	0	0	1	0	25	0	0
08/15/2003	---	---	---	---	0	0	0	0	0	64	31
08/16/2003	---	---	---	---	0	1	0	1	40	0	0
08/17/2003	---	---	---	---	0	0	0	0	40	0	0
08/18/2003	---	---	---	---	0	0	0	0	0	0	0
08/19/2003	---	---	---	---	0	0	0	0	14	0	0
08/20/2003 *	---	---	---	---	0	1	0	1	14	0	0
08/21/2003 *	---	---	---	---	0	0	0	0	42	0	0
Total:	0	0	0	0	0	2	1	5	675	200	103
# Days:	0	0	0	0	14	14	14	14	14	14	14
Average:	0	0	0	0	0	0	0	0	48	14	7
YTD	1	0	0	11	16,384	8,125	4,545	10,308	841,666	726,150	1,261,373

* See sampling comments <http://www.fpc.org/currentDaily/smpcomments.htm>

Definitions for Smolt Index Counts

WTB (Collection) = Salmon River Trap at Whitebird : Collection Counts

IMN (Collection) = Imnaha River Trap : Collection Counts

GRN (Collection) = Grande Ronde River Trap : Collection Counts

LEW (Collection) = Snake River Trap at Lewiston : Collection Counts

LGR (Index) = Lower Granite Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LGS (Index) = Little Goose Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

LMN (Index) = Lower Monumental Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

RIS (Index) = Rock Island Dam Second Powerhouse Bypass Trap : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

MCN (Index) = McNary Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

JDA (Index) = John Day Dam Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse Flow / (Powerhouse Flow + Spill)}

BO2 (Index) = Bonneville Dam Second Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 2 Flow / (Powerhouse 1 & 2 Flow + Spill)}

BO1 (Index) = Bonneville Dam First Powerhouse Bypass Collection System : Passage Index Counts

Passage Index = Collection Counts / {Powerhouse 1 Flow / (Powerhouse 1 & 2 Flow + Spill)}

JDA and BO2 data collected for the FPC by Pacific States Marine Fisheries Commission.

RIS data collected for the FPC by Chelan Co. PUD/Washington Dept. of Fish and Wildlife.

LGR, LMN, and MCN data collected for the FPC by Washington Dept. of Fish and Wildlife.

LGS and GRN data collected for the FPC by Oregon Dept. of Fish and Wildlife.

IMN data collected for the FPC by the Nez Perce Tribe.

Cumulative Adult Passage at Mainstem Dams Through: 08/21

DAM	Spring Chinook						Summer Chinook						Fall Chinook					
	2003		2002		10-Yr Avg.		2003		2002		10-Yr Avg.		2003		2002		10-Yr Avg.	
	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack	Adult	Jack
BON	192,010	14,258	268,813	6,477	122,177	6,086	114,808	13,358	127,436	7,952	38,022	5,207	14,580	2,106	17,587	1,447	15,520	1,614
TDA	131,207	11,522	181,176	3,870	80,975	4,136	101,490	10,441	113,069	5,743	32,585	3,775	8,755	1,903	10,883	1,053	7,464	965
JDA	101,436	10,206	139,887	2,403	67,822	3,122	95,542	10,132	105,354	5,615	30,300	3,298	5,493	1,527	6,547	1,304	3,925	688
MCN	95,550	11,123	129,357	3,872	62,536	3,162	93,844	11,116	109,937	6,810	31,244	3,358	4,296	1,178	5,398	552	2,858	435
IHR	78,170	8,020	85,207	1,826	38,964	1,925	20,742	4,602	26,607	2,437	7,616	1,067	309	45	543	66	150	13
LMN	70,603	7,344	76,304	1,537	38,073	1,899	18,718	3,589	23,744	1,710	7,642	945	205	48	335	67	99	27
LGS	69,017	7,079	77,232	1,815	37,097	2,034	14,299	3,537	20,854	2,254	6,945	1,196	141	5	201	17	66	11
LWG	70,609	8,295	75,025	2,089	35,689	2,016	16,423	4,142	22,159	1,953	6,987	1,260	39	14	100	7	37	7
PRD	18,136	656	34,083	196	15,528	317	83,004	3,933	96,326	1,455	27,332	1,075	3,306	759	2,922	190	1,276	142
RIS	16,881	753	24,017	827	11,565	538	81,543	6,858	86,825	3,216	24,224	3,420	838	237	873	95	352	107
RRH	4,216	450	9,999	161	4,017	126	63,167	6,195	73,104	2,807	16,932	1,550	343	98	343	44	95	34
WEL	4,313	172	7,585	41	2,377	152	41,886	1,551	60,147	331	12,073	978	0	0	0	0	0	0

DAM	Coho						Sockeye			Steelhead			
	2003		2002		10-Yr Avg.		2003	2002	10-Yr Avg.	10-Yr			Wild 2003
	Adult	Jack	Adult	Jack	Adult	Jack				2003	2002	Avg.	
BON	992	174	144	34	314	60	39,277	49,603	46,748	222,069	267,237	159,707	81,593
TDA	73	4	5	0	19	4	34,178	40,553	37,478	62,933	129,918	66,862	27,109
JDA	20	0	8	0	10	0	35,408	41,911	40,480	46,302	92,592	44,764	18,183
MCN	0	0	0	0	0	0	32,035	39,173	36,934	32,589	69,593	34,841	12,520
IHR	0	0	0	0	0	0	37	60	17	21,147	33,527	17,882	5,693
LMN	0	0	0	0	0	0	14	46	24	15,402	27,109	15,522	4,833
LGS	0	0	0	0	0	0	22	38	26	11,173	20,518	9,644	4,251
LWG	0	0	0	0	0	0	12	55	24	22,247	23,551	11,220	5,852
PRD	9	6	42	9	5	0	36,533	47,879	45,446	6,637	8,360	3,822	0
RIS	9	0	3	0	1	0	34,756	44,255	40,886	4,462	6,165	2,899	2,633
RRH	2	0	22	0	1	0	30,300	12,309	24,179	3,528	4,129	1,785	2,056
WEL	0	0	0	0	0	0	28,712	10,462	23,767	1,827	2,871	1,074	1,017

RIS, RRH and WEL are through 08/20.

LGR is missing data for 3/6.

**PRD is not reporting Wild Steelhead numbers.

These numbers were collected from the COE's Running Sums text files, except where otherwise noted.

Wild steelhead numbers are included in the total.

Historic counts (pre-1996) were obtained from CRITFC and compiled by the FPC.

Historic counts 1997 to present were obtained from the Corps of Engineers.

Page last updated on: 8/22/03

BON counts from January 1, 2003 to March 14, 2003 (our counts begin March 15)

Chinook Adult	Chinook Jack	Steelhead	Wild Steelhead
3,758	0	3,443	408

Two Week Transportation Summary

08/09/03 TO 08/22/03

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	19,842	15	453		631	20,941
	Sum of NumberBarged	17,719	10	397		475	18,601
	Sum of NumberBypassed	39	0	0		0	39
	Sum of Numbertrucked	4,463	4	72		189	4,728
	Sum of TotalProjectMortalities	228	1	9		6	244
LGS	Sum of NumberCollected	11,972		134	2	170	12,278
	Sum of NumberBarged	8,514		109	1	148	8,772
	Sum of NumberBypassed	0		0	0	0	0
	Sum of Numbertrucked	3,664		30	1	31	3,726
	Sum of TotalProjectMortalities	368		10	0	5	383
LMN	Sum of NumberCollected	5,568	31	35	1	28	5,663
	Sum of NumberBarged	3,809	21	28	1	19	3,878
	Sum of NumberBypassed	0	0	0	0	0	0
	Sum of Numbertrucked	2,397	14	5	0	13	2,429
	Sum of TotalProjectMortalities	157	0	2	0	0	159
MCN	Sum of NumberCollected	316,090				675	316,815
	Sum of NumberBarged	284,931				604	285,554
	Sum of NumberBypassed	0				0	0
	Sum of Numbertrucked	21,507				28	21,535
	Sum of TotalProjectMortalities	3,657				2	3,690
Total Sum of NumberCollected		353,472	46	622	678	879	355,697
Total Sum of NumberBarged		314,973	31	534	606	661	316,805
Total Sum of NumberBypassed		39	0	0	0	0	39
Total Sum of Numbertrucked		32,031	18	107	29	233	32,418
Total Sum of TotalProjectMortalities		4,410	1	21	2	42	4,476

YTD Transportation Summary

TO: 08/22/03

		Species					
Site	Data	CH0	CH1	CO	SO	ST	Grand Total
LGR	Sum of NumberCollected	1,148,774	2,576,975	89,990	9,748	2,336,597	6,162,084
	Sum of NumberBarged	1,122,378	2,470,893	89,264	9,549	2,265,797	5,957,881
	Sum of NumberBypassed	2,894	45,590	7	0	53,142	101,633
	Sum of NumberTrucked	5,279	54,212	112	78	15,591	75,272
	Sum of TotalProjectMortalities	18,219	5,981	607	121	2,068	26,996
LGS	Sum of NumberCollected	586,050	1,849,316	87,841	5,437	1,946,681	4,475,325
	Sum of NumberBarged	574,927	1,795,258	87,371	5,399	1,942,867	4,405,822
	Sum of NumberBypassed	0	22	0	0	3	25
	Sum of NumberTrucked	3,669	52,601	30	1	881	57,182
	Sum of TotalProjectMortalities	6,887	3,395	438	37	2,925	13,682
LMN	Sum of NumberCollected	284,923	463,314	26,546	3,307	1,229,812	2,007,902
	Sum of NumberBarged	246,893	440,282	25,842	3,262	1,150,928	1,867,207
	Sum of NumberBypassed	34,112	6,866	681	0	75,945	117,604
	Sum of NumberTrucked	2,457	15,163	5	40	1,650	19,315
	Sum of TotalProjectMortalities	1,461	1,003	18	5	1,289	3,776
MCN	Sum of NumberCollected	6,985,940	1,041,786	71,922	546,063	155,070	8,800,781
	Sum of NumberBarged	4,606,418	5,470	8,989	10,989	701	4,632,567
	Sum of NumberBypassed	2,280,527	1,035,084	62,604	534,272	154,084	4,066,571
	Sum of NumberTrucked	21,507	0	0	28	0	21,535
	Sum of TotalProjectMortalities	71,493	1,133	329	438	242	73,635
Total Sum of NumberCollected		9,005,687	5,931,391	276,299	564,555	5,668,160	21,446,092
Total Sum of NumberBarged		6,550,616	4,711,903	211,466	29,199	5,360,293	16,863,477
Total Sum of NumberBypassed		2,317,533	1,087,562	63,292	534,272	283,174	4,285,833
Total Sum of NumberTrucked		32,912	121,976	147	147	18,122	173,304
Total Sum of TotalProjectMortalities		98,060	11,512	1,392	601	6,524	118,089

